DNR Elk Advisory Committee
Meeting Summary

Thursday, March 16, 2017 -- 9:30 a.m. -- Black River Falls DNR Center

Elk Advisory Committee Members Present:
Kevin Wallenfang, *WDNR Wildlife Management Big Game Ecologist – Committee Chair*
Dan Storm, *WDNR Science Services - Ungulate Researcher*
Kris Johansen, *WDNR WCR Area Wildlife Supervisor*
Peter Bakken, *WDNR Black River State Forest Property Supervisor*
Kurt Haas, *WDNR Jackson County Conservation Warden*
Pat Beringer, *WDNR Upper Chippewa Area Wildlife Supervisor*
Laine Stowell, *WDNR Sawyer County/Clam Lake Elk Biologist*
Gary Dieck, *Wisconsin Wildlife Federation*
Scott Roepke, *WDNR Jackson and Clark County/Black River Elk Biologist*
Dan Eklund, *USFS Chequamegon-Nicolet National Forest Wildlife Biologist*
Rich Kirchmeyer, *WI Bowhunters Association*
Tami Ryan, *WDNR Wildlife Health Section Chief*
Allen Jacobson, *Wisconsin Conservation Congress*
Travis Bartnick, *GLIFWC Wildlife Biologist*

Members Absent:
Lou George, *Rocky Mountain Elk Foundation*
Tim Ginnett, *UWSP, Professor and Associate Dean for Academic Affairs*

Guests present:
Lindsey Long, *WDNR State Wildlife Veterinarian*
Mike Schrage, *Minnesota DNR Fond du Lac Reservation Wildlife Biologist*
Eric Canania, *WDNR Assistant Deer and Elk Ecologist*

Year 3 of Kentucky Elk Translocation Efforts

Pat Beringer and Tami Ryan, who served as trapping crew leaders, summarized the 2017 trapping effort, indicating that rain, warm temps and a bumper acorn crop made trapping difficult. In total, 28 elk are to be transported to Wisconsin on March 23rd. All indications are that our people continue to be viewed as highly capable and professional by Kentucky staff. Elk have been in the holding pens since January 6th and have completed all required health testing. All elk passed the disease testing. Pregnancy tests have been taken but the results are still unknown at this time. The haul crew is heading down on Monday, March 20 and will be returning Thursday, March 23, 2017 at the Flambeau River State Forest quarantine pen with the elk. All committee members are welcome to attend. A DNR camera crew will be on site.

A brief financial update was provided and indicates the total cost of the first year of trapping in Kentucky was approximately $105,000. The second year cost was less than $90,000, but People Soft has made it more difficult to determine. Cost for 2017 appear to be even lower, but are undetermined at this time. RMEF is paying most of the bills this year from their pledge, and GLIFWC is also covering the cost of feed up to $10,000.

Research/Monitoring

Dan Storm provided an update on Travis Bryan's graduate project, studying the Black River Falls herd using GPS collar and trail camera data. Discussions are also occurring with Scott Hygnstrom regarding the development of educational kiosks to be used at various locations. He also provided a brief Snapshot Wisconsin update as it relates to the elk management zones, and indicated that camera monitoring is being more fully put into the hands of volunteers.

Population Estimates for the Northern Herd

Dan Storm informed the committee that trail camera grids are utilized to estimate population parameters at a cost effective rate. Methods of camera surveys need to be tested to determine what is realistic and what will work the best. At times, several cameras have not been active which is a problem that needs to be address in order to get the best data during critical times. Last year, the cow-calf ratio was what is to be expected. However, this year's data appears to be off and likely due to a lack of active cameras. An effort must be made to remind the volunteers to monitor cameras as we need them to. Clam Lake population estimates using the N Mixture Model produced an inflated estimate. The Royal Nichols Model produced a much closer estimate to direct observations. These estimates might be over estimating cow-calves and underestimating bulls.

Laine Stowell provided his estimates for the various elk groups (see attached End of Elk Year 2016/17 summary). He estimates that the main Clam Lake herd is 73 to 80. Since 2011, elk have been moved around area through assisted dispersal efforts, resulting in sub-groups located near Moose Lake, Shanagolden, and Butternut. Elk continue to be monitored using trail cameras, radio collars, and direct observations. Cow-calf pairs are quite visible during monitoring efforts. Cow-calf estimates are strong but bull estimates are lacking. Current bull numbers were estimated by using previous year's data and adding direct observations. For the entire Clam Lake herd, post calving estimates for 2017 are expected to be 157-174. This is approximately what the herd was three years ago following the severe winter of 2013-14 when approximately 20% of bulls, 22% of cows, and 80+% of calves were lost. Current WSI for the year is approximately 30 points.

The addition of 28 elk and their unknown calves will put the 2017 post calving population at an estimated (best case situation) 192-209 elk. However, the committee agreed that using Kentucky elk in the estimate is risky considering that there is no way of knowing how many will survive or how many calves will be born. There is also concern that initiating a hunt could jeopardize our invitation to trap in Kentucky in 2018. Kevin asked that each member of the committee give their assessment as to whether they feel confident that the herd will surpass 200 elk and trigger a hunt in 2017.

Johansen:	Not confident that the numbers are at the 200 level. Recommends no hunt in 2017.
Bakken:	No hunt.
Eklund:	The numbers do not indicate with confidence 200 elk, no to a hunt.
Storm:	Low confidence, and does not feel initiating a hunt is warranted.
Jacobson:	No hunt.
Kirchmeyer:	The threshold is not there. Wish elk having just arrived from Kentucky, a hunt now would look too much like a "put and take" style hunt which sends a bad impression.
Bartnick:	The tribes are at an understanding that once the population hits 200 they will initiate a hunt. He will provide our population estimates to them and feels that there is a possibility that they will push for a hunt if numbers are close. If it occurs, he recommends focusing a possible hunt in the Northern part of the Clam Lake range to avoid conflict with the new Kentucky elk.
Dieck:	No hunt.
Roepke:	The numbers don't suggest a hunt. He suggests this discussion is tabled until they are finished with the Kentucky trapping operation. He is worried about the perception of a "put and take" style hunt.
Beringer:	The population estimate is not strong enough to indicate 200 elk, and feels we cannot jeopardize the remaining years of elk reintroduction with a premature hunt. No hunt.
Stowell:	Wait until we are done with Kentucky and revisit the discussion after that year.
Ryan:	Wait until we are done with Kentucky and possibly beyond that. No hunt.
Wallenfang:	The 5% rule on population estimates will result in conflict when deciding the appropriate number of tags.

Committee Recommendation:

The Elk Advisory Committee members agree that confidence is low that the elk population will surpass 200 animals at any time in 2017, and as a result recommends that a hunt not take place in 2017.

Updates

Testing of Drones for Elk Abatement
Dr. Scott Hygnstrom has requested approval to test the use of drones to drive elk out of problem areas in Jackson County. Dr. Hygnstrom has acquired funding and is prepared to hire a technician to do the work this summer. Local staff is supportive of testing it. Kevin indicated that the department can authorize this activity and will draft a letter that will allow the project to move forward.

Elk Fencing Along I94
Kris provided a summary of efforts replace or repair fencing along the interstate. Some fencing that was down has been repaired and has helped keep elk away. Local staff has met with DOT. ATC is installing a new power line and will be widening the right of ways. Local staff will be meeting with them to discuss installation of up to 19 miles of fencing on the east side of the road. If things don't work with ATC, there remains possibilities with. Scott R added that there are multiple areas for possible funding. Prices depend on various factors, but overall it's about a $400,000 project. Six foot fence is preferred.

Winter Trapping/Collaring in Jackson County
Scott R provided an update on elk recapture efforts to replace bad collars, and to relocate elk outside the elk range. Six animals were caught this winter, to date. They have also caught a bull calf that was not previously known.

Habitat Project Updates:
In Jackson County, Scott indicating that he hasn't received any new money for projects, but has left over grant money that he is hoping to use for prescribed burns as well as managing forested openings. In the north, Laine indicated that last year was very wet, but they have created multiple forest openings. Money from RMEF will be used to maintain trail and forested openings. Dan E says the USFS has been working on multiple habitat management projects as well as a Black Torch habitat analysis. They have multiple wildlife openings for elk to use with invasive species being monitored/treated at all openings.

Elk Plan Updates
The committee discussed whether or not there is need to create new elk management plans. After debating the pros and cons of one large plan vs. one for each elk area, the committee felt that the need for a new plan was most evident in Jackson County that would help reconsider current population goals, elk range boundaries, and conflicts. In contrast, the needs in the north were not immediate, plus it is unknown as to how new Kentucky elk will disperse in the north. The final resolution was to create one statewide plan in two phases that will eventually be merged. The Jackson County herd will have their needs addressed first, followed by the plan to address the northern herd in the future, and eventually melding both plans into one.

Spring Calf Searching & Assisted Dispersal
An estimated 21-25 calves are expected to be born this spring in the Jackson County herd. Scott hopes to capture and collar at least 50% of them with GPS collars. While staff time is needed, he hopes to use volunteers to conduct much of the work over approximately 6 weeks.

Spring calf searches will not occur in northern herd this year per a previous recommendation by this committee. All agreed to discuss assisted dispersal during the late summer meeting.

Possible Elk Reintroduction to Minnesota
Mike Schrage, biologist for the Fond du lac Tribe in Minnesota was in attendance and wrapped up the meeting with an update on a possible elk reintroduction in Minnesota.

Attachment

End of Elk Year 2016/2017

Pre-calving Season Elk Population Estimate and 2017 Calving Season Forecast

Group Area	Sub-Group Area	Number of Cows *	Number of Calves *	Number of Bulls <3 yrs
Clam Lake	Day Lake	7	3-4	1
	Storage Shed	5	2	1
	1029	5	2	0
	208	6	3	1
	Ghost Creek	4	3	1
	Subtotal	27	13-14	33-39 Bulls **
Expanded Range	Meyer's Farm	6	3	7
	Rusk County	5	3	2
	Subtotal	11	6	9
Butternut		4	1	4-6
Shanagolden		2-3	1	2-4
Moose Lake		7	3	5-8 **
	Subtotal	13-14	5	11-18
Total		51-52 cows	24-25 calves	53-66 Bulls
Grand Total		128-143 (8 to 12 percent increase over 2016 estimate) (Calf to cow ratio is 47-48 to 100 cows) (Bull to cow ratio is 104 to 127 Bulls to 100 cows)		

*Low end Calf counts are recent direct counts. Upper range numbers are uncertain "range counts" on certain groups without clear, full counts. **Bull numbers are based upon last year's numbers minus this year's observed mortalities plus recently observed yearlings and 2 year olds with cow/calf groups (last year's numbers would not include bulls less than 3 years old). Cow and Calf numbers are direct counts during December, January and February. Calf survivorship is 68 to 71 percent as of 28 February 2017.

Cows 2 years old during Sept. 2016= 3 cows; 3 X 0.32 (0.32 is average birth rate for Sept. 2 year olds)=0.96 to 3X 0.5 (0.5 is observed birth rate for Sept. 2 year olds after a low WSI and early spring)=1.5 **1 to 2calves born to CLEH September 2 year old cows during 2017 Calving Season**

Cows 3-14 years old during Sept. 2016=36 cows; 36 X 0.9 (0.9 is the average birth rate for Sept. 3-14 year old cows)=32.4 = **32 calves estimated born to CLEH Cows 3-14 years old in Sept. 2016 during the 2017 calving season.**

Cows 15-17 years old during Sept. 2016= 6 cows; 6 X 0.46 (0.46 is the average birth rate for Sept. 15-17 year old cows)= 2.74 calves; **2-3 calves estimated born to CLEH Cows 15-17 years old in Sept.. 2016 during the 2017 calving season.**

35 to 37 calves are estimated to be born during the 2017 Elk Calving Season

5 year average calf mortality during the calving season (from season start to end of June) is 18 percent (19 calf deaths per 107 calves born 2009 through 2013)

Upon factoring in the 5 year average calf mortality during the calvings season the population estimate post calving season would be 29 to 31 calves plus 128 to 143 elk equal 158 to 175 elk. These numbers do not include "immigrants" or losses due to mortality on the existing herd.

Modified 3/29/2017 to include cow 215's death in early March. That change was incorporated in the front page that was distributed at the 3/16/2017 elk committee meeting, but not on the calf calculations and summary numbers on the second page. This copy incorporates those adjustments. LRS